**United States** Environmental Protection Agency Washington, D.C. 20460

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## EPA Green Buildings on **Brownfields Pilot**

St. Louis, MO

Office of Brownfields Cleanup and Redevelopment

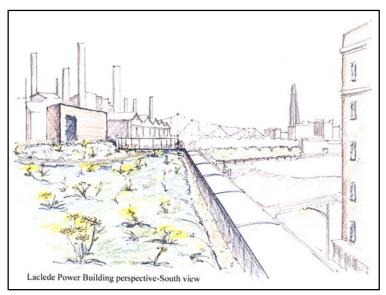
Quick Reference Fact Sheet

## Old Laclede Power Building

Trailnet, Inc. is reusing the Old Laclede Power Building as part of it's Confluence Greenway project using green building design principles. To help achieve a LEED Gold rating for the reused building, Trailnet and the St. Louis Development Corporation utilized their Green Buildings on Brownfields Pilot support to retain the services of a local engineering firm with LEED-certified engineers to study the feasibility of constructing a green roof. The study determined that with some modifications to the roof support structure or replacement of the roof material, a green roof could be constructed and the collected rainwater could be used for a number of practical applications.

Green roofs, or vegetated roof systems, may reduce heat islands in urban environments, reduce stormwater runoff, increase the energy effectiveness of roofs, and extend the life of roofing systems. The rainwater that is not absorbed by a green roof can be collected and put back to use on the property as gray water for uses such as toilet flushing or irrigation, thereby reducing stormwater discharge. Reusing rainwater decreases potable water costs to the building owner and reduces the strain on the region's fresh water supply. For the Old Laclede Power Building, an existing underground vault beneath the building may be used to hold the captured rainwater for use in gray water applications, or as a heat sink for geothermal heat pumps to heat and cool the building with less energy.

The building is located near the confluence of the Mississippi and Missouri Rivers, and will be an integral part of the Confluence Greenway Project, a 40-mile riverside park and trail system. When completed, the Old Laclede Power Building will serve as a community gathering place for tourists and local residents, office space for Trailnet and the Confluence Greenway Project, and a trailhead for bicyclists, rollerbladers, joggers, hikers, fishermen, history enthusiasts, and nature watchers. The building may also be a showcase for the use of green building principles in adaptive reuse projects.



The Old Laclede Power Building will be renovated using green building design principles.